33 ABSTRACT

A first tungsten-based sintered material of the present invention comprises Ni in a range from 0.2 to 1.5% by mass, Y_2O_3 in a range from 0.1 to 1% by mass, and optionally, (a) VC in a range from 0.05 to 0.5% by mass and/or (b) Co and/or Fe in a range from 0.01 to 5% by mass, the balance being tungsten (W); W phases are sinter-bonded; Ni phase or Ni-Co/Fe alloy phase which has the largest particle diameter of 5 μ m or less and Y_2O_3 having the largest particle diameter of 5 μ m or less are distributed at boundaries of the W phases; and the largest particle diameter of the W phase is 30 μ m or less. The first tungsten-based sintered material is preferably used for a hot press mold for optical glass lenses.